



**Office Locations:** Austin, College Station, Corpus Christi, Dallas, Edinburg, El Paso, Fort Worth (2 locations), Houston (2 locations), Kilgore, Laredo, Lubbock, San Antonio, Tyler

**TEXAS MANUFACTURING ASSISTANCE CENTER (TMAC)** Serving firms throughout Texas with fifteen field offices. TMAC is a partnership of: The Texas Engineering Extension Service, Texas A&M University System; The Automation & Robotics Research Institute, University of Texas at Arlington; The Institute for Manufacturing & Materials Management, University of Texas at El Paso; the University of Houston; Texas Tech University; The University of Texas Pan American; and Southwest Research Institute. Contact: Drew Casani, Ranch Road 620 N. #A24, Austin TX, 78754, 800-625-4876, Fax: (512) 452-2130, Email: [tmac@tmac.org](mailto:tmac@tmac.org), Website: <http://www.tmac.org/>

## THE MANUFACTURING EXTENSION PARTNERSHIP IN TEXAS

Manufacturing Extension Partnership (MEP) is a nationwide system of services and support for smaller manufacturers to become more globally competitive. At the heart of the system is a network of affiliated, locally-based manufacturing extension centers. Each center, like TMAC, is a partnership, typically involving federal, state, and local governments; industry; educational institutions; and other sources of expertise, information and funding support.

### COMPANY CLIPS

#### Texas Nameplate Aces Waste Reduction

Texas Nameplate Company (TNC), founded in 1946 as a family-owned business, manufactures nameplates, identification labels, dials, and panels seen on all types of products, from refrigerators and computer equipment to high-pressure valves and oil field equipment. Located in Dallas, Texas, the company currently employs approximately 60 people. TNC identified environmental consciousness as one of its seven business drivers. After winning the Malcolm Baldrige Award in 1998 the company decided to seriously address this issue. TNC turned to the Texas Manufacturing Assistance Center (TMAC) for help implementing ISO 14001.

TMAC and TNC established an Environmental Management Team (EMT) to meet weekly. TMAC provided overviews of the ISO 14001 Standard and led the weekly team meetings. The EMT assumed responsibility for writing procedures, identifying aspects, and internal auditing. TNC identified and prioritized a list of almost 300 environmental, developing action plans to reduce or eliminate the top seven. As part of the implementation, TNC identified its environmental costs. The ISO 14001 implementation process enabled TNC to reduce the cost of its water usage by 30 percent, its electricity by 10 percent, and cleaning rag usage by 38 percent. The company's actions also freed up 25 percent more floor space in its facility. Even more significantly, TNC reduced its wastewater discharge by 30 percent. The company saved over \$60,000 in environmental costs in the first year alone.

As part of TNC's overall commitment to quality and waste reduction, the company selected a mascot for the program. The ACE (A Clean Environment) Frog was born, and is now proudly displayed throughout the facility, reminding everyone that TNC means business

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### STATE STATS

DATA\* COVERS JANUARY TO DECEMBER 2001

Number of projects completed  
with firms  
**469**

Number of firms served  
**382**

Number of firms served for  
the first time  
**216**

Federal cost share for current  
operating year  
**\$5,682,400**

State/other cost share for current  
operating year  
**\$11,364,800**

*\*Data as reported from center*

DATA\*\* COVERS JANUARY TO DECEMBER 2001

Increased sales & retained sales  
**\$64,998,054**

Client capital investment  
**\$14,301,002**

Total cost savings  
**\$15,356,823**

Jobs (created & retained)  
**704**

*\*\*Source: Independent client impact survey*



when it comes to reducing waste. TNC chose a frog as the program mascot because frogs need clean water to lay eggs. As a tadpole begins breathing, clean air is a necessity. Finally, the frog requires clean soil to provide food and shelter. “ACE” is now included on all TNC’s product documentation for customers.

### **Aspen Manufacturing Grows Capacity with Lean Techniques**

Aspen Manufacturing, Inc., based in Humble, Texas, is one of the largest privately owned coil manufacturers in the U.S. The company has been in business for over 35 years and employs less than 250 people. The company's current product line includes a broad range of residential coils as well as coils and blowers for manufactured homes.

Aspen Manufacturing built its first facility in 1971 with careful planning. Over the years, as the business quickly grew, the space eventually became inadequate to hold expanding operations and was no longer laid out for optimal productivity. Aspen hired architect Harry Gendel to build a new facility, and he advised the company to contact the Gulf Coast office of the Texas Manufacturing Assistance Center (TMAC) for help solving the efficiency problem. TMAC worked with Aspen over a six-week period of time to develop a complete analysis of existing practices and operating procedures. A group of Aspen employees participated in TMAC's lean manufacturing workshop, which offers employees a basic understanding of the philosophy and practices behind lean technology. The company became very excited about the cellular manufacturing concept and decided to implement it into the design of the new plant.

TMAC helped Aspen re-evaluate its original plans for the facility and shaved off 65,000 square-feet of planned space. By reducing the amount of space to be built Aspen was able to save \$2.5 million off the cost of the facility. As an added bonus, the cellular design has significantly reduced lead times. Profits have increased as a result, and so has efficiency.